

REMARKS

The Office Action of June 25, 2010 has been carefully considered.

It is noted that claims 11-23 are rejected under 35 USC 103 (a) over the patent to Chiappetta, et al. in view of the patent to Peterson, et al.

Applicant submits that the claims presently on file differ essentially and in an unobvious, highly advantageous manner from the methods disclosed in the references.

The presently claimed invention undertakes the following steps:

A1) a core strand is provided with an intermediate layer of a plastic material;

A2) the outer strand layers are wound around the core strand with the intermediate layer;

A3) during the step A2 the outer layers are already pressed into the plastic material to a finally intended extent by a heat deformation process; and

A4) the overall cable with its outer strand layers and the inner strand core is hammered, whereby regions of the outer strands heavily deformed beyond the deformation of the wire

section at the cable circumference even in areas that are located in the wired cable substantially more inwardly than the wire sections located at the cable's circumference.

The method of Chiappetta, et al. undertakes the following steps;

C1) a core strand is provided with an intermediate layer made of plastic material;

C2) the outer layer is wound around the core strand with the intermediate layer;

C3) in step C2 the outer layers are only laid on top of the plastic material;

C4) the outer layers are pressed into the plastic material by any known cold-forming process such as roller compacting or swaging (see col. 2, lines 54-62). In this way, the plastic material flows between the outer layers (cold flow radially outwardly, see col. 2. line 60) and the outer layers change their position in the direction of the center of the wire rope. In this way, the outer layers are deformed somewhat on their outer side ("crown wires", see col. 3, lines 5-7). A deformation of the outer layers follows according to the method described, but is not required or necessary (see Fig. 4 and the description starting at col. 3, line 54).

By comparing the individual steps mentioned above it is believed clear to one skilled in the art that the present invention and Chiappetta, et al. deal with basically different methods. It is clear that both methods starting with steps A3 or C3 are substantially different. Following step A3 of the presently claimed invention, the strands are arranged in their intended position in the cable. In Chiappetta, et al., on the other hand, in order to accomplish this an additional step C4 must follow step C3, namely a cold deformation process in which the plastic material flows. Chiappetta, et al. provide no step that is comparable with step A4 of the present invention.

For this last feature, the Examiner turns to Peterson, et al. Applicant, however, submits that there is no suggestion by Chiappetta, et al. or Peterson, et al. for hammering the wound wire rope to substantially deform the outer strands, as in the presently claimed invention.

It is known to one skilled in the art that in order to even accomplish the "cold flow" of the plastic material according to step C4, it is necessary that the outer strands are continuously subjected over an extended period of time to a force by, for example, roller compacting or swaging. Without such an application of force to the plastic material, based on physical

grounds, would not flow.

Furthermore, one skilled in the art also knows that in contrast, hammering only provides an application of force over a very short time period, which would not lead to a flowing of plastic material. Instead, the plastic material, as described in the presently claimed invention, is mainly deformed elastically. Plastic deformation takes place in the outer strands. Thus, one skilled in the art will clearly understand that it would not be possible via hammering to have the outer strands pressed into the plastic material so that the plastic material flows into the regions between the strands.

Additionally, it is not possible with hammering to provide a wire rope that has a form as shown in Figures 3 and 4 of Chiappetta, et al.

Thus, Applicant submits that hammering is not an equivalent to the step C4 of Chiappetta, et al. Therefore, it would not be obvious to combine the teachings of Peterson, et al. and Chiappetta, et al. as suggested by the Examiner.

Additionally, the method described by Chiappetta, et al. would not permit the production of a wire rope having a configuration as shown in the Figure of the present application because the mentioned cold deformation of the outer strands

would not permit deformation as accomplished in the presently claimed invention. Instead, a wire rope having the shape shown in Figures 3 and 4 of Chiappetta, et al. would result. Correspondingly, a person skilled in the art would not find it obvious to arrive at the presently claimed invention from the teachings of Chiappetta, et al. Not only do Chiappetta, et al. not teach step A3 of the present invention in which the strands are in the finally intended position, but there is also no suggestion of deforming the outer strands by hammering as in the present invention. Such a teaching is also not present in Peterson, et al. Peterson, et al. only hammer the individual strands and thereafter wind them about the core strand (see col. 1, lines 48-50; col. 2, lines 15-36; and col. 3, lines 4 and 5). There is no teaching of hammering the entire wound rope, as carried out in the presently claimed invention. If one skilled in the art did combine the teachings of Peterson, et al. and Chiappetta, et al. the following would result:

- 1) Initially hammering the individual strands;
- 2) Winding these hammered strands around a core strand provided with an intermediate layer of plastic material; and
- 3) Pressing the hammered strands into the plastic material by

cold deformation.

There is no teaching by these references of the present invention and one skilled in the art would not find it obvious to arrive at the presently claimed invention from these two references.

In view of these considerations it is respectfully submitted that the rejection of claims 11-23 under 35 USC 103 A) over a combination of the above discussed references is overcome and should be withdrawn.

Reconsideration and allowance of the present application are respectfully requested.

Any additional fees or charges required at this time in connection with this application may be charged to Patent and Trademark Office Deposit Account No. 02-2275.

Respectfully submitted,
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